WHAT IS CLAIMED IS:

1.   A computer-readable medium having stored theron a data structure for an electronic data element comprising:

a first data field containing data representing an identifier functioning as a link to one or more data objects; and

a second data field representing a state of the identifier in the first data field, wherein the second data field may be one of

a) a first state, in which said electronic data element may be accessed by one or more data object processing operations and whereby said identifier is assignable to one or more data objects,

b) a second state, in which said electronic data element may not be accessed by one or more data object processing operations and whereby said identifier is assignable to one or more data objects, or

c) a third state, in which said electronic data element may not be accessed by one or more data object processing operations and whereby said identifier is not assignable to one or more data objects.

2.   The computer-readable medium of claim 1, wherein the first data field and the second data field are in a table.

3.   The computer-readable medium of claim 1, wherein the first data field is in a first table and the second data field is in a second table.

4.   The computer-readable medium of claim 1, wherein the electronic data element is implemented in object orientated programming as an instance of a class.

5.   The computer-readable medium of claim 1, wherein the data structure further comprises a third data field functioning as a flag representing whether the electronic data element is the default identifier.

6.   The computer-readable medium of claim 1, wherein during a data processing operation the second field is changed from the first state to the second state.

7.   The computer-readable medium of claim 6, wherein during the data processing operation the identifier is assigned to one or more data objects which are stored.

8.   The computer-readable medium of claim 7, wherein during the data processing operation the second filed is changed to the third state if the one or more assigned data objects are committed.

9.   The computer-readable medium of claim 6, wherein during the data processing operation a new electronic data element is created and the second field of the new electronic data element is set to the first state.

10.   The computer-readable medium of claim 9, wherein the data structure further comprises a third data field functioning as a flag representing whether the electronic data element is the default identifier, and further wherein during the data processing operation the third data field of the new electronic data element is flagged as the default identifier.

11.   The computer-readable medium of claim 10, wherein during the data processing operation the second field of the prior electronic data element is set to the second state.

12.   The computer-readable medium of claim 10, wherein during the data processing operation the third field of a previous electronic data element is examined, and, if the third field of the previous electronic data element is flagged as the default identifier, the third field of the previous electronic data element is flagged as not being the default identifier.

13.   The computer-readable medium of claim 1, wherein during a data processing operation that sets a block on the electronic data element, the second field of the electronic data element is examined and if the state of the second field of the electronic data element is the first state or the second state, the data processing operation prevents a change in the state of the second field to the third state.

14.   The computer-readable medium of claim 13, wherein during the data processing operation the block is removed if storing of a data object is committed.

15.   The computer-readable medium of claim 13, wherein during the data processing operation the block is irreversibly set if the electronic data element is in the third state.

16.   The computer-readable medium of claim 1, wherein during a data processing operation the electronic data element is shared locked.

17.   The computer-readable medium of claim 16, wherein during a data processing operation the electronic data element is shared locked prior to assignment of the electronic data element to a data object.

18.   The computer-readable medium of claim 17, wherein during the data processing operation the electronic data element is shared unlocked after storing of the data object is committed.

19.   The computer-readable medium of claim 17, wherein during the data processing operation, the state of the share lock of the data element is examined prior to assignment of the electronic data element to a data object.

20.   The computer-readable medium of claim 1, wherein during a data processing operation the electronic data elements are replicated from a source system to a target system.

21.   The computer-readable medium of claim 1, wherein the identifier of the first data field comprises a globally unique identifier.

22.   The computer-readable medium of claim 1, wherein the identifier of the first data field comprises a time stamp.